

SERVICE MANUAL


MINIDISC PLAYER

BASIC MD MECHANISM : AZG-F A

- This Service Manual contains information about the difference between AM-HX77 (AHK) and AM-HX70 (AHK). If requiring other information, see Service Manual of AM-HX70 (AHK), (S/M Code No. 09-009-435-8R1).

SPECIFICATIONS

Main unit	
Playback system	MiniDisc digital audio system
Laser pickup	Semiconductor laser
Sampling Frequency	44.1 kHz
Number of channels	Stereo: 2 channels Monaural: 1 channel
D/A converter	1-bit
Frequency response	40 to 20,000 Hz \pm 4 dB 20 to 20,000 Hz \pm 1 dB (10 k Ω)
Wow and Flutter	Below measurable limit (\pm 0.00 1% W.PEAK)
Output	Phone jack
Maximum output level	8 mW + 8 mW (16 Ω)
Power requirements	DC 1.2 V using the supplied NI-MH rechargeable battery MHB-901 DC 1.5 V using an LR6 (size AA) dry cell battery AC house current using an optional AC adaptor
Battery life	Using the supplied rechargeable battery Approx. 19 hours (with power save on: approx. 25 hours) Using an LR6 (size AA) dry cell battery Approx. 29 hours (with power save on: approx. 38 hours) Using the supplied rechargeable battery and an LR6 (size AA) dry cell battery Approx. 51 hours (with power save on: approx. 67 hours)
Maximum outside dimensions	Approx. 71.6 (W) X 12.8 (H) X 77.7 (D) mm (excluding projected parts and controls)
Weight	Approx. 58 g excluding batteries.
<Battery charger RB-M02 K>	
Rated voltage	AC 240 V, 50 Hz

- Design and specifications are subject to change without notice.
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
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ELECTRICAL MAIN PARTS LIST

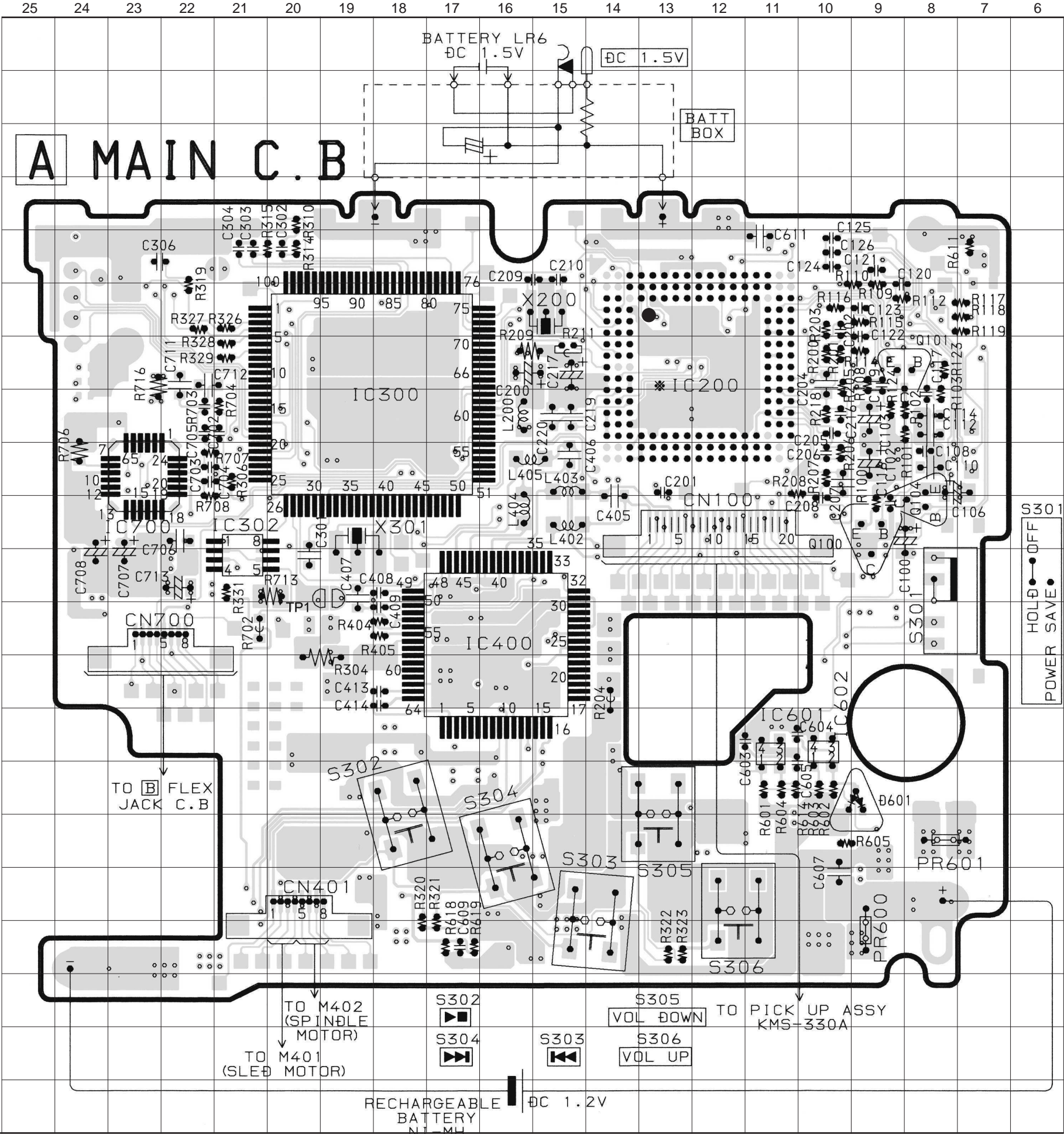
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC				C209	87-A10-533-080		C-CAP,V 15P-50 J CH
	87-A20-707-010		C-IC,CXA2523AR	C210	87-A10-533-080		C-CAP,V 15P-50 J CH
	87-A21-608-010		C-IC,CXD2665GA	C216	87-A10-765-080		C-CAP,V 0.033-10 K B
	8A-HM5-601-010		C-IC,MSM66573L-047TB-9	C217	87-A11-751-080		C-CAP,TN 22U-4 M P
	87-A21-724-040		C-IC,S-93C56AMFN	C219	87-A11-049-080		C-CAP,U 1-6.3 K B
	87-A21-038-040		C-IC,NJU7014R-TE2				
	87-A21-575-010		C-IC,BD6606KVT	C220	87-A11-049-080		C-CAP,U 1-6.3 K B
	87-A21-316-080		C-IC,S-8328B24MC	C301	87-A11-049-080		C-CAP,U 1-6.3 K B
	87-A20-861-040		C-IC,S-80808ANNP	C302	87-A10-561-080		C-CAP,V 0.01U-16 K B
	87-A20-982-040		C-IC,S-80822ANNP	C303	87-A10-561-080		C-CAP,V 0.01U-16 K B
	87-A21-627-040		C-IC,XC6367B102MR	C304	87-A10-561-080		C-CAP,V 0.01U-16 K B
	87-A21-341-040		C-IC,TA2131FL				
TRANSISTOR				C305	87-A10-770-080		C-CAP,V 0.1-10 K B
	89-115-884-080		CHIP -TRANSISTER 2SA1588Y	C306	87-A10-770-080		C-CAP,V 0.1-10 K B
	87-A30-148-080		C-TR,2SC4738GR	C308	87-010-787-080		CAP, U 0.022-25
	87-026-644-080		C-TR,DTA144EE	C400	87-A10-556-080		C-CAP,V 2200P-50 K B
	87-A30-261-080		C-FET,FDC633N	C401	87-A10-770-080		C-CAP,V 0.1-10 K B
	87-A30-262-080		C-FET,FDC634P				
	89-332-654-080		CHIP TRANSISTOR, 2SC3265Y	C402	87-A10-770-080		C-CAP,V 0.1-10 K B
	87-A30-147-080		C-TR,2SA1832GR	C403	87-A11-046-080		C-CAP,TN 100U-4 M F95 B
	87-A30-499-040		C-FET,2SK2009	C404	87-A10-591-080		C-CAP,TN 47-6.3 M F95-BCASE
	87-A30-033-080		C-FET,2SK2035	C405	87-A11-049-080		C-CAP,U 1-6.3 K B
				C406	87-A11-049-080		C-CAP,U 1-6.3 K B
DIODE							
	87-A40-124-080		C-DIODE,RB501V-40	C407	87-A10-902-080		C-CAP,U 0.47-10 K B
	87-A40-687-080		C-DIODE,M1FH3	C408	87-A10-765-080		C-CAP,V 0.033-10 K B
	87-017-850-080		C-DIODE,DAP222	C409	87-A10-765-080		C-CAP,V 0.033-10 K B
				C410	87-A10-556-080		C-CAP,V 2200P-50 K B
				C411	87-A10-556-080		C-CAP,V 2200P-50 K B
				C412	87-A10-556-080		C-CAP,V 2200P-50 K B
				C413	87-A10-556-080		C-CAP,V 2200P-50 K B
				C414	87-A10-556-080		C-CAP,V 2200P-50 K B
				C415	87-A10-770-080		C-CAP,V 0.1-10 K B
				C416	87-A11-751-080		C-CAP,TN 22U-4 M P
				C417	87-A11-807-080		C-CAP,TN 4.7U-6.3 M P
				C418	87-A11-058-080		C-CAP,U 0.22-10 K B
				C419	87-A11-058-080		C-CAP,U 0.22-10 K B
				C420	87-A11-058-080		C-CAP,U 0.22-10 K B
				C600	87-A11-806-080		C-CAP,TN 47U-6.3 M PSLB
MAIN C.B							
C100	87-A11-751-080		C-CAP,TN 22U-4 M P	C601	87-A10-557-080		C-CAP,V 3300P-25 K B
C102	87-A11-751-080		C-CAP,TN 22U-4 M P	C602	87-A11-806-080		C-CAP,TN 47U-6.3 M PSLB
C103	87-A11-751-080		C-CAP,TN 22U-4 M P	C603	87-A10-770-080		C-CAP,V 0.1-10 K B
C104	87-A11-046-080		C-CAP,TN 100U-4 M F95 B	C604	87-A10-770-080		C-CAP,V 0.1-10 K B
C106	87-A11-751-080		C-CAP,TN 22U-4 M P	C605	87-A10-554-080		C-CAP,V 1000P-50 K B
C107	87-A10-766-080		C-CAP,V 0.047-10 K B				
C108	87-A10-561-080		C-CAP,V 0.01U-16 K B	C606	87-A11-807-080		C-CAP,TN 4.7U-6.3 M P
C109	87-A10-671-080		C-CAP,V 0.022-16 K B	C607	87-A11-049-080		C-CAP,U 1-6.3 K B
C110	87-A11-058-080		C-CAP,U 0.22-10 K B	C608	87-A10-547-080		C-CAP,V 220P-25 J CH
C111	87-A10-558-080		C-CAP,V 4700P-25 K B	C609	87-A10-537-080		C-CAP,V 33P-50 J CH
C112	87-A11-049-080		C-CAP,U 1-6.3 K B	C610	87-A11-751-080		C-CAP,TN 22U-4 M P
C113	87-A10-558-080		C-CAP,V 4700P-25 K B				
C114	87-A11-049-080		C-CAP,U 1-6.3 K B	C611	87-A11-049-080		C-CAP,U 1-6.3 K B
C115	87-016-448-080		C-CAP,TN 2.2-10 F95P	C614	87-012-286-080		C-CAP,U 0.01-25 KB
C116	87-A10-543-080		C-CAP,V 100P-50 J CH	C701	87-A10-770-080		C-CAP,V 0.1-10 KB
C117	87-A10-561-080		C-CAP,V 0.01U-16 K B	C702	87-A10-543-080		C-CAP,V 100P-50 J CH
C118	87-A10-561-080		C-CAP,V 0.01U-16 K B	C703	87-A10-543-080		C-CAP,V 100P-50 J CH
C119	87-A10-671-080		C-CAP,V 0.022-16 K B				
C120	87-A10-559-080		C-CAP,V 6800P-25 K B	C704	87-A10-543-080		C-CAP,V 100P-50 J CH
C121	87-A10-766-080		C-CAP,V 0.047-10 K B	C705	87-A10-543-080		C-CAP,V 100P-50 J CH
C122	87-A10-561-080		C-CAP,V 0.01U-16 K B	C706	87-A11-049-080		C-CAP,U 1-6.3 K B
C123	87-A10-561-080		C-CAP,V 0.01U-16 K B	C707	87-016-449-080		C-CAP,TN 10-4 F95 P
C124	87-A10-554-080		C-CAP,V 1000P-50 K B	C708	87-016-449-080		C-CAP,TN 10-4 F95 P
C125	87-A10-554-080		C-CAP,V 1000P-50 K B				
C126	87-A10-554-080		C-CAP,V 1000P-50 K B	C709	87-A11-058-080		C-CAP,U 0.22-10 K B
C127	87-A10-554-080		C-CAP,V 1000P-50 K B	C710	87-A11-058-080		C-CAP,U 0.22-10 K B
C128	87-A10-554-080		C-CAP,V 1000P-50 K B	C711	87-A11-049-080		C-CAP,U 1-6.3 K B
C129	87-A10-554-080		C-CAP,V 1000P-50 K B	C712	87-A11-049-080		C-CAP,U 1-6.3 K B
C200	87-A11-751-080		C-CAP,TN 22U-4 M P	C713	87-A11-751-080		C-CAP,TN 22U-4 M P
C201	87-A10-770-080		C-CAP,V 0.1-10 K B				
C202	87-A10-770-080		C-CAP,V 0.1-10 K B	C715	87-A11-318-080		C-CAP,TN 220U-2.5 SVB2
C204	87-A10-902-080		C-CAP,U 0.47-10 K B	C716	87-A11-318-080		C-CAP,TN 220U-2.5 SVB2
C205	87-A10-770-080		C-CAP,V 0.1-10 K B	C717	87-A11-061-080		C-CAP,S 2.2-10 K B
C206	87-A10-550-080		C-CAP,V 470P-50 K B	C720	87-A11-058-080		C-CAP,U 0.22-10 KB
C207	87-A10-902-080		C-CAP,U 0.47-10 K B	CN100	87-A61-315-080		C-CONN,20P H XF2L-2035
C208	87-A10-561-080		C-CAP,V 0.01U-16 K B				
				CN401	87-A61-316-080		C-CONN,8P H XF2L-0835
				CN700	87-A61-317-080		C-CONN,8P H XF2L-0825
				D300	87-A40-556-080		C-LED,CL-270HR RED
				L100	87-005-910-080		C-COIL,S 22UH M LK2125
				L102	87-A50-359-080		C-COIL, 22UH K NLFC252018

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
L200	87-A50-646-080		C-COIL, 22UH K NLFC201614
L400	87-A50-011-080		C-COIL, 47UH LQH3C
L401	87-A50-537-080		C-COIL, 100UH C4-K3L
L402	87-A50-475-080		C-COIL, 10UH K NLFC201614
L403	87-A50-475-080		C-COIL, 10UH K NLFC201614
L404	87-A50-475-080		C-COIL, 10UH K NLFC201614
L405	87-A50-475-080		C-COIL, 10UH K NLFC201614
L406	87-005-910-080		C-COIL, S 22UH M LK2125
L600	87-A50-325-080		C-COIL, 180UH C4-K3L
L601	87-A50-012-080		C-COIL, 100UH LQH3C
L701	87-005-769-080		C-COIL, S 100UH K
PR600	87-A91-769-080		C-PROTECTOR, 0.75A ERY32SB075
PR601	87-A91-769-080		C-PROTECTOR, 0.75A ERY32SB075
R204	87-A91-879-080		C-F-BEAD, BK1608TS102
R210	87-A00-761-080		C-RES, V 510K-1/16W F
R211	87-A91-880-080		C-F-BEAD, BLM10A601SG
R314	87-A00-759-080		C-RES, V 27K-1/16W F
R315	87-A00-756-080		C-RES, V 10K-1/16W F
R320	87-A00-755-080		C-RES, V 6.8K-1/16W F
R321	87-A00-757-080		C-RES, V 12K-1/16W F
R322	87-A00-758-080		C-RES, V 22K-1/16W F
R323	87-A00-760-080		C-RES, V 68K-1/16W F
R618	87-A00-761-080		C-RES, V 510K-1/16W F
R619	87-A00-762-080		C-RES, V 680K-1/16W F
R701	87-A91-879-080		C-F-BEAD, BK1608TS102

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
R702	87-A91-879-080		C-F-BEAD, BK1608TS102
R717	87-A91-878-080		C-F-BEAD, BK1608HS241
R718	87-A91-878-080		C-F-BEAD, BK1608HS241
R719	87-A91-878-080		C-F-BEAD, BK1608HS241
S300	87-A91-436-080		C-SW, PUSH 2-1-1 SPVE3.8
S301	87-A90-703-080		C-SW, SL 1-1-3 SSSS813-B-2B
S302	87-A90-232-080		C-SW, TACT SKQRAA
S303	87-A90-232-080		C-SW, TACT SKQRAA
S304	87-A90-232-080		C-SW, TACT SKQRAA
S305	87-A90-232-080		C-SW, TACT SKQRAA
S306	87-A90-232-080		C-SW, TACT SKQRAA
X200	87-A70-276-080		C-VIB, CER 22.57MHZ CSACW2257MX
X301	87-A70-277-080		C-VIB, CER 6.0MHZ CSTRC0600MG05

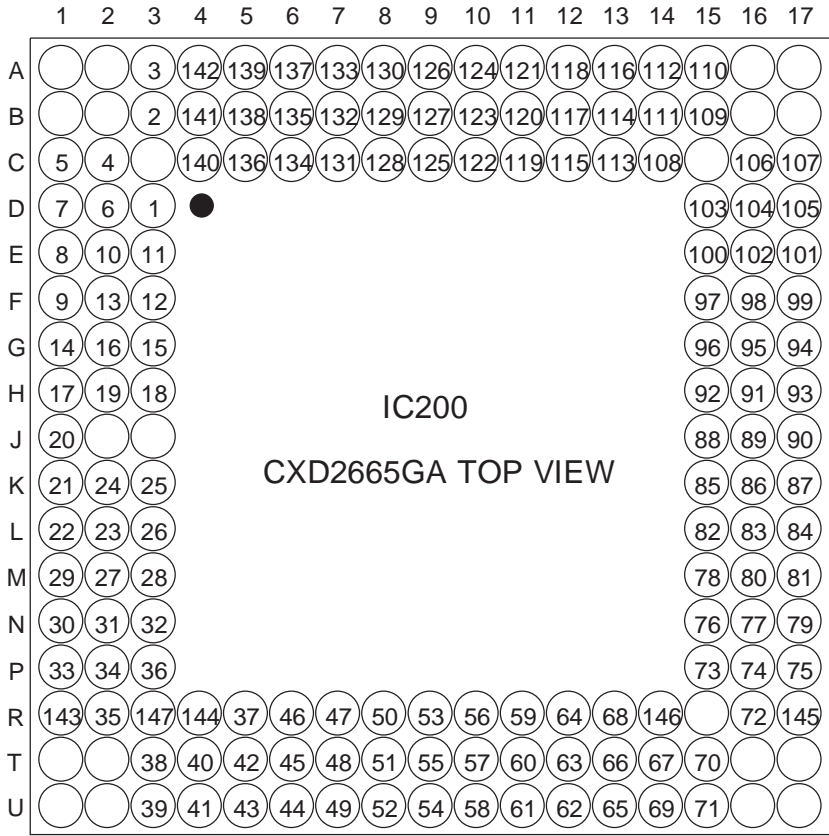
FLEX JACK C.B

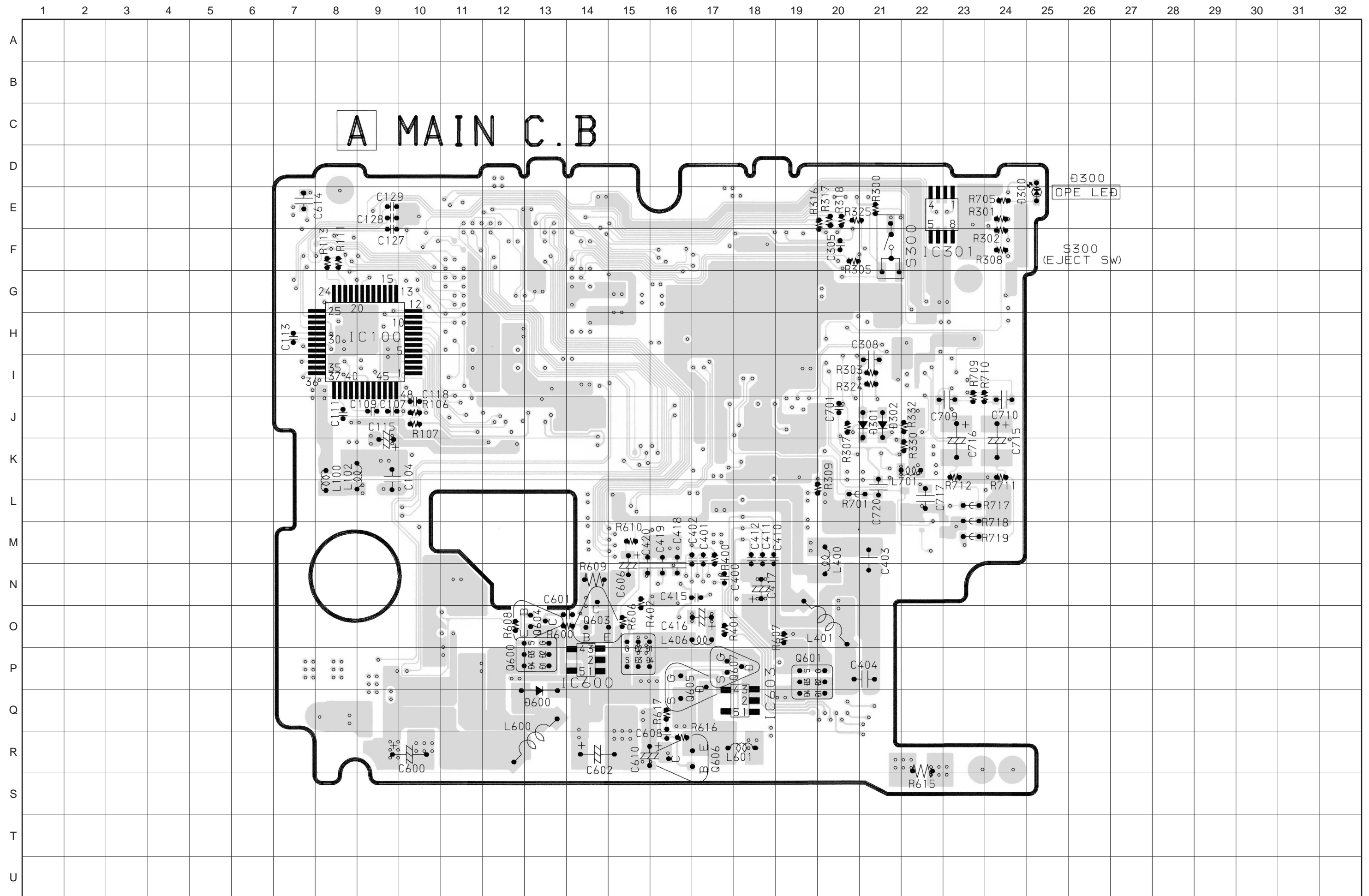
J700	8A-HM5-602-110	PWB, FLEX JACK
	87-A60-682-010	JACK, 3.5 ST 7P



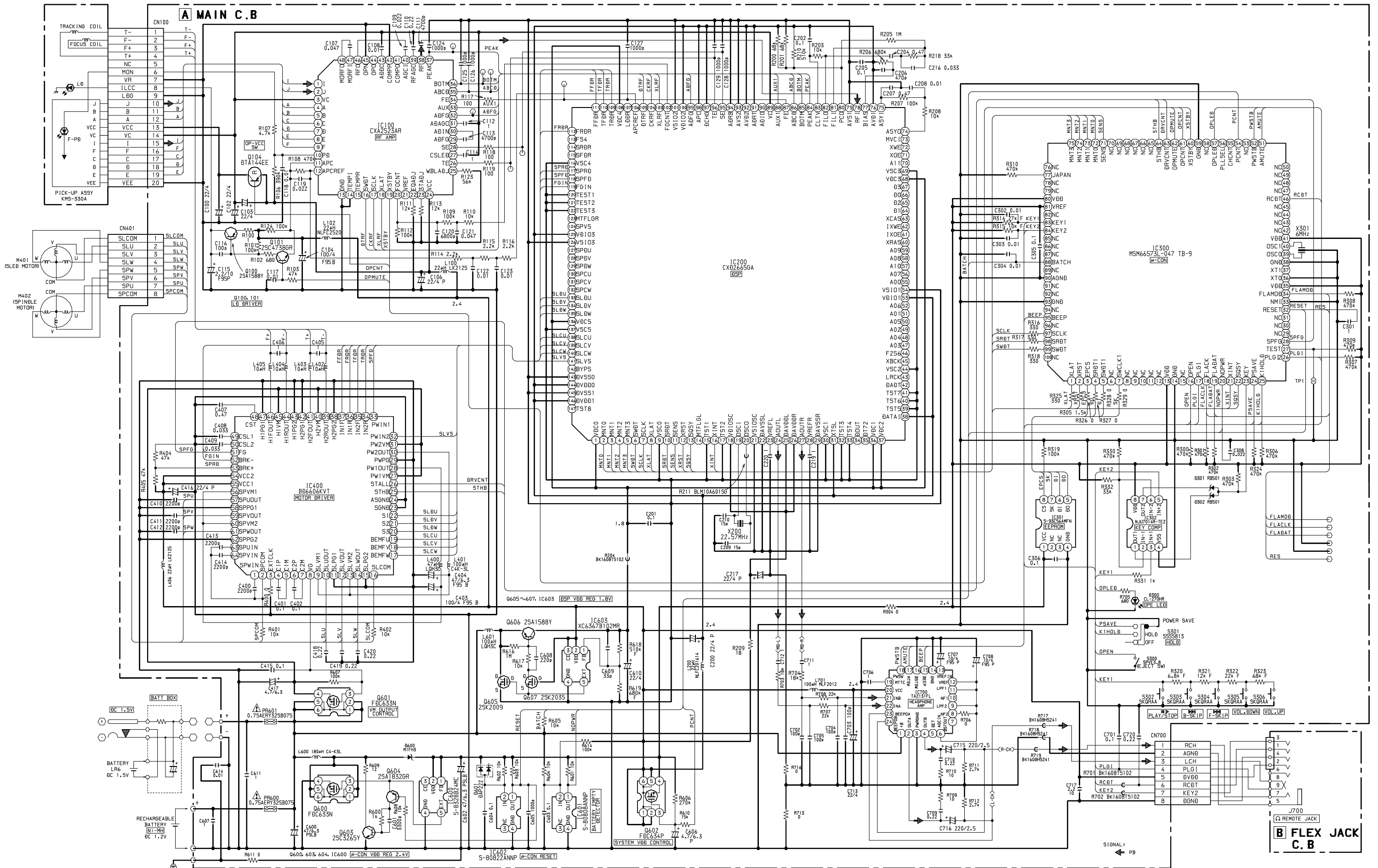
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TERMINAL DETAIL FIGURE

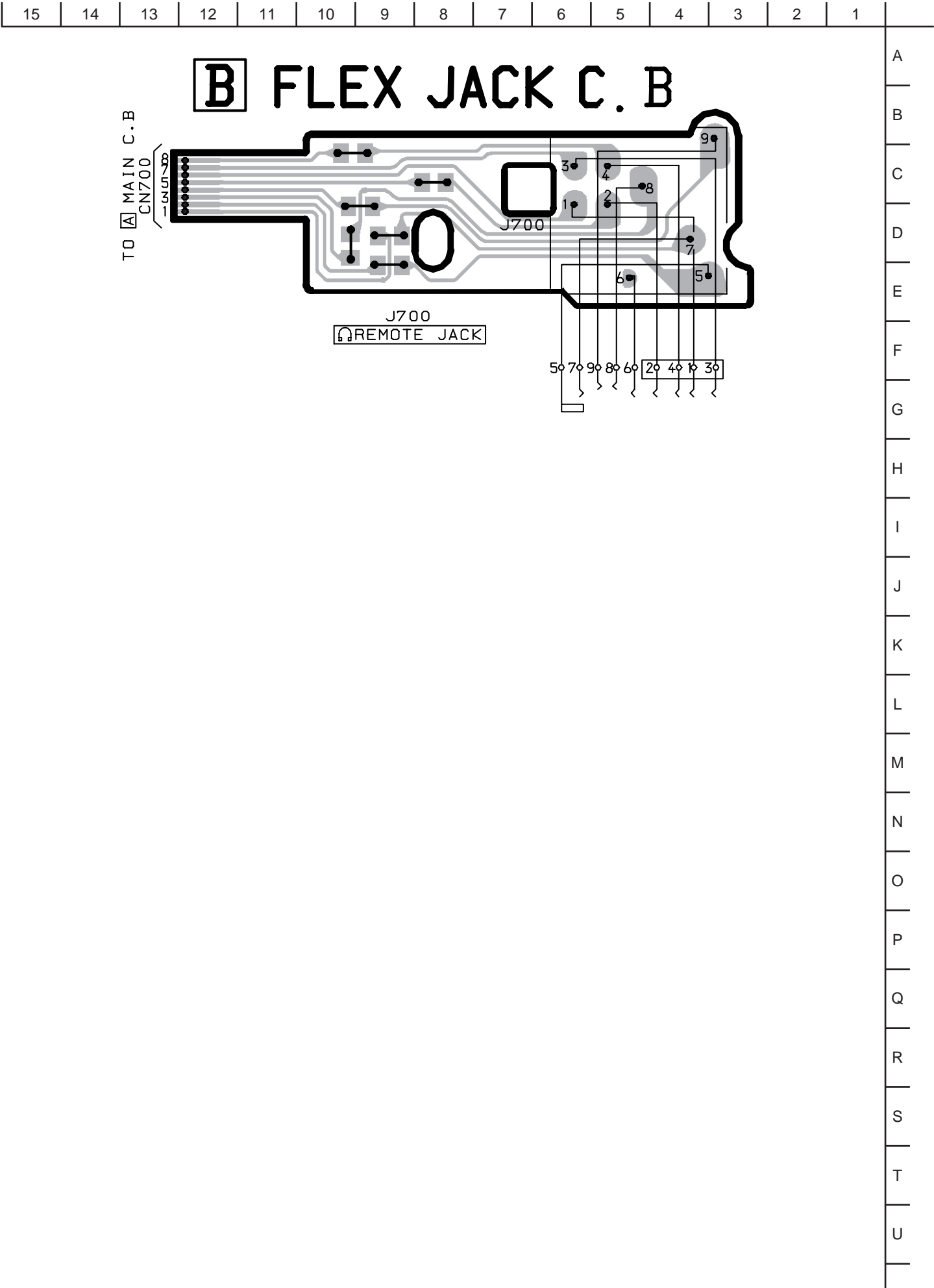




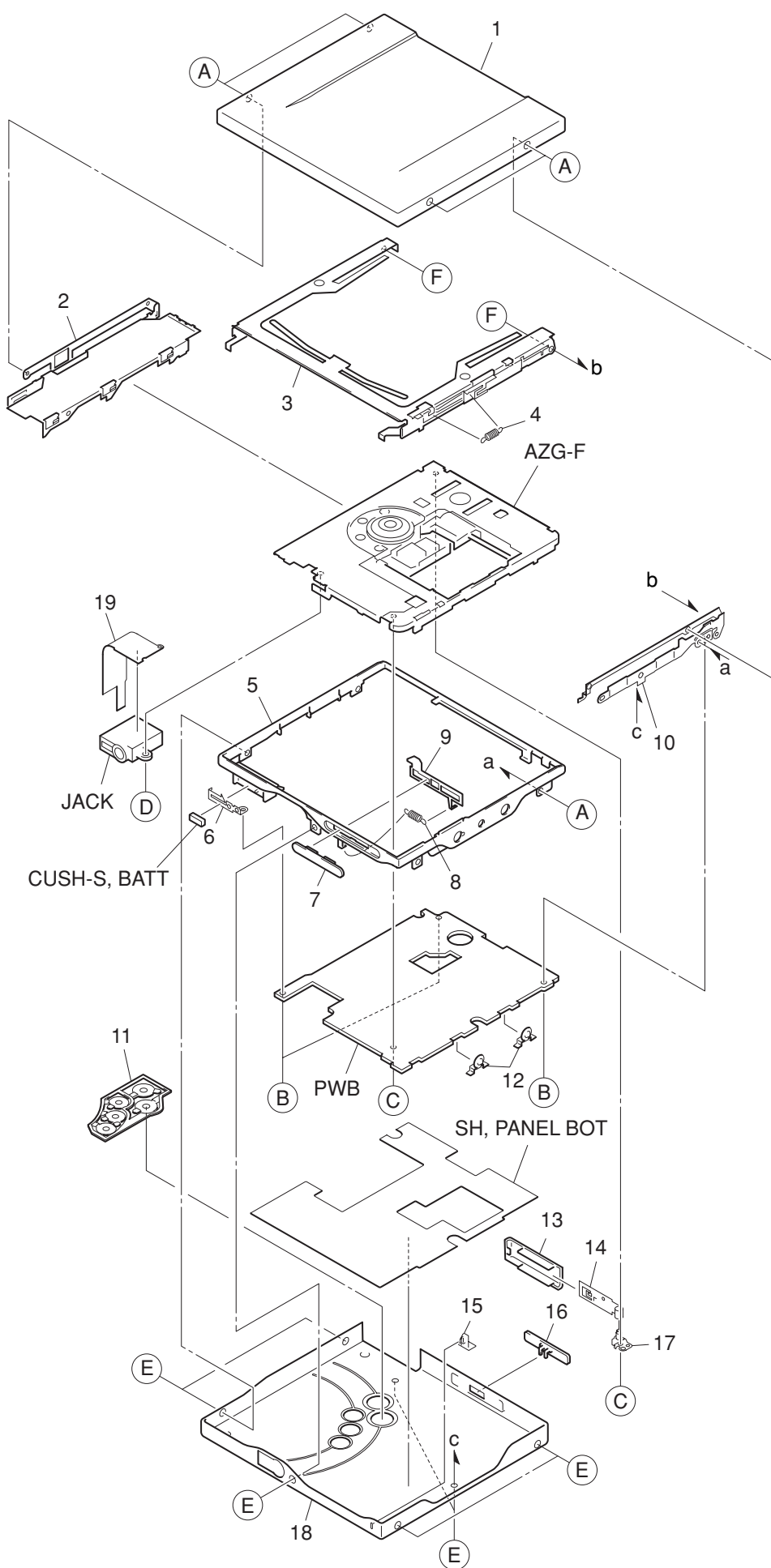
SCHEMATIC DIAGRAM (MAIN / FLEX JACK)



WIRING – 2 (FLEX JACK)



MECHANICAL EXPLODED VIEW 1 / 1



MECHANICAL PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-HM5-051-010		PANEL ASSY,FR<[S]AHK>
1	8A-HM5-058-010		PANEL ASSY,FR L<[L]AHK>
2	8A-HM5-253-010		BOX ASSY,BATT E
3	8A-ZGF-221-010		HLD R ASSY,CYRG 2
4	8A-ZGF-207-010		SPR-E,EJECT
5	8A-HM5-054-010		FRAME,CENTER 77 S<[S]AHK>
5	8A-HM5-061-010		FRAME,CENTER 77 L<[L]AHK>
6	8A-HM5-216-010		BAT-CONTACT,-
7	8A-HM5-056-010		KNOB,SL OPEN 77 S<[S]AHK>
7	8A-HM5-063-010		KNOB,SL OPEN 77 L<[L]AHK>
8	8A-HM3-217-110		SPR-E,EJECT
9	8A-HM5-209-010		PLATE,EJECT
10	8A-HM5-251-110		FRAME ASSY,RE
11	8A-HM5-006-010		KEY,CONT MAIN
12	8A-HM3-216-010		BAT-CONTACT,EX
13	8A-HM5-055-010		LID,BATT 77 S<[S]AHK>
13	8A-HM5-062-010		LID,BATT 77 L<[L]AHK>
14	8A-HM5-210-010		HINGE ASSY,BATT
15	8A-HM5-009-010		LENS,OPE
16	8A-HM5-057-010		KNOB,SL HOLD 77 S<[S]AHK>
16	8A-HM5-064-010		KNOB,SL HOLD 77 L<[L]AHK>
17	8A-HM5-213-010		BAT-CONTACT ASSY,+
18	8A-HM5-053-010		PANEL,REAR<[S]AHK>
18	8A-HM5-060-010		PANEL,REAR L<[L]AHK>
19	8A-HM5-602-110		PWB,FLEX JACK
A	87-HM1-243-010		S-SCREW,1.4-1.4CRNL
B	87-078-186-010		SCRW-SR,1.4-1.8 CR L
C	8A-HM3-222-010		S-SCREW,+1.4-3.0 CR
D	8A-HM3-233-010		S-SCREW,+1.4-3.5 N
E	8A-HM5-221-010		S-SCREW,1.4-1.8 CR N
F	87-B10-152-010		W-P,0.83-2.0-0.25 C

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink
LA	Aqua Blue				

ACCESSORIES / PACKAGE LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
△	1	87-B30-244-010	CHARGER, RB-M02K
	2	8A-HM6-951-010	BAG, CARRING
	3	87-B30-303-110	BAT, MHB-901 (S)
	4	87-B30-221-010	CASE, BATTERY
	5	87-B30-372-010	HEADPHONE, HP-M031 L1<[L] AHK>
	5	87-B30-295-010	HEADPHONE, HP-M031 S<[S] AHK>
	6	8A-HM6-954-010	CLIP, RC-CL33
	7	8A-HM3-951-010	BOX, BAT ASSY AHM-3
	8	8A-HM5-955-010	RC UNIT, RC-HX77 L<[L] AHK>
	8	8A-HM5-951-010	RC UNIT, RC-HX70 W<[S] AHK>
	9	8A-HM5-922-010	IB, HK (ECH) HX77

アイワ株式会社 〒110-8710 東京都台東区池之端1-2-11 ☎03(3827)3111 (代表)
AIWA CO.,LTD. 2-11, IKENOHATA 1-CHOME, TAITO-KU, TOKYO 110, JAPAN TEL:03 (3827) 3111